ABSTRACT OF THE DISCLOSURE

A system and method for a media processor separates the functions of topology creation and maintenance from the functions of processing data through a topology. The system includes a control layer including a topology generating element to generate a topology describing a set of input multimedia streams, one or more sources for the input multimedia streams, a sequence of operations to perform on the multimedia data, and a set of output multimedia streams, and a media processor to govern the passing of the multimedia data as described in the topology and govern the performance of the sequence of multimedia operations on the multimedia data to create the set of output multimedia streams. The core layer includes the input media streams, the sources for the input multimedia streams, one or more transforms to operate on the multimedia data, stream sinks, and media sinks to provide the set of output multimedia streams.